

THE GREAT ADVENTURE
OF
SEEING

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AMERICAN FOUNDATION
FOR THE BLIND INC.

The Great Adventure of Seeing

A STRANGE CREATURE WAS GOING along the street. It moved itself by raising and swinging the four legs on which it was mounted.

Clop, clop, clop was the sharp sound the strange creature made as it went along, drawing a contraption as strange as itself—a boxlike affair mounted on round things that rumbled as they turned.

"What is that?" a companion asked of the serious, bespectacled young man who looked on in wide-eyed wonder.

He pondered the question. What could it be?

It couldn't be a dog, says Earl Sparling in the *New York World-Telegram*, "because a dog wouldn't be hitched to a wagon." The young man knew the wagon by the rumbling sound its wheels made on the pavement.

Finally he had to give up. He had no idea what this creature was.

"It is a horse," he was told.

It was the first horse that Earl Musselman, twenty-two, of Allentown, Pennsylvania, had ever seen. He broke out laughing at the way the animal's head bobbed up and down and the way its hind feet moved. "A horse is so funny," Earl said later, according to Mr. Sparling. "I had pictured a horse as swift and graceful. I thought a horse ran like the wind."

Earl was born blind, without pupils in his eyes. He was educated as a blind man, in an institution for the blind at Overbrook, Pennsylvania. He had mastered a dark world. He was, according to the *New York Times*, "able to see shadows and bright colors. Since the bandages were removed, he confessed, he has been getting 'all mixed up' over different shades that he never believed had existed."

"For eight years he has been a student at the Institute for the Blind, and has traveled alone by bus and trolley daily between the school and the home of his uncle, D. W. Laubach, a Philadelphia optometrist.

"At school he has been interested in dramatics. He plays the saxophone, and has broadcast over the radio several times."

It occurred to Dr. G. H. Moore of the Graduate Hospital in Philadelphia, that an operation might give the young man vision. The consent of all concerned was obtained. Two months or more ago the operation was performed. After due time the bandages were removed from his eyes. He could see. Not much at first, but ever increasingly. Six weeks after the operation, the story of it was given to the world.

IN the meantime, Earl Musselman is learning to adjust himself to a new world. For a time he distinguished men from women, because men wear neckties. Mr. Sparling accompanied Earl during part of his first adventures with seeing, and tells the dramatic story in a series of articles.

The first time Earl saw a human face, he was puzzled, we learn as we pursue this account:

He was shown, when he could see that well, the likeness of a human face, an illustration in an advertisement.

"What is that, Earl?"

"Now let's see," said Earl, his eye down close to the magazine. He had to give it up. He had never seen a human face at that time, much less the dot-and-line symbol which the seeing world accepts conventionally as the pictured representation of a face.

They explained that he was looking at a human picture, and he asked, "Is it a lady or a man?" His chief way, even these weeks later, of distinguishing the picture of a man from the picture of a woman is by looking for the tie.

"If there isn't a tie, I know it's a lady."

There were other problems of physiognomy. That first printed face he looked at was a full-face view. Later he was shown another printed face in profile. What was that? He didn't know.

He was completely bewildered when told that that was a human face too. No seeing person can imagine what a shock it was to him to learn that the human face could look so different by a mere change in view-point. How could a face look this way if you looked at it one way, and an entirely different way if you looked at it another way?

Mr. Sparling, sharing this young adventurer's experiences in the "new world" of vision, has found, according to his account,

that "to keep him company a part of the way is something like a profound re-education, almost an introduction to the theory of knowledge itself. You can not be with him long without pondering on problems which only the philosophers have worried about in their weighty, unread volumes of speculation." Furthermore:

Learning to see has proved a bewildering experience, a great adventure into a topsy-turvy universe. The Allentown youth, obscure a few weeks ago, the center of nation-wide interest since, is still at it. He is still learning to see.

The operation, kept secret for more than a month, was performed in Philadelphia. The bandages were removed, and there was light on the second day. Out of that glare he has had to create a new mental universe. The droll things that have happened to him in the attempt have been like the things that happened to Alice when she stepped through the looking-glass.

For, indeed, he, too, stepped through a looking-glass, the mirror that is the human eye, and entered into a world so strange that he scarcely yet has found

words to describe it. Size literally means nothing to him, except as measured by the feel of his hands. Size as measured by the eye is beyond him.

"For example," he frowns, "I have trouble telling the difference between a lemon and a grapefruit unless I feel them. They both have the same color."

SOME weeks after the operation he saw some children skipping rope, we read.

"What are those kids doing, Earl?" he was asked.

He didn't know. He had to think back to his past. Later he explained the mental process thus:

"I figured it out," he explains, "by the sound of the rope against the sidewalk. I had heard that sound when I was blind. Slap, slap, slap, like that. The first time I heard it when I was blind, I asked what it was. Some one told me it was little girls skipping rope."

All he knew about a face was what he could feel.

He doesn't know how to put it in words. His primary reactions are fast fading away. He becomes a bit confused and silent when he tries to explain. Someway, because he could feel the whole face with his fingers, it seemed to him once that he should be able also to see it all at once.

He sits with an orange in his hand and tries to explain the difference between knowing it as something only felt—a roundness known completely to the mind, "seen" inwardly as a whole—and knowing it as something seen with the eye, a roundness that doesn't look round at all because the eye can see only a small part of it.

He can't get the differentiation into words. The very idea of the difference confuses him.

Indeed, words themselves are enough of a problem without worrying about things less practical. Like a child, he has had to learn his A B C from a nursery book. He could speak the English language perfectly, but when he first looked at it printed, in the large-lettered newspaper head-lines, he was looking at

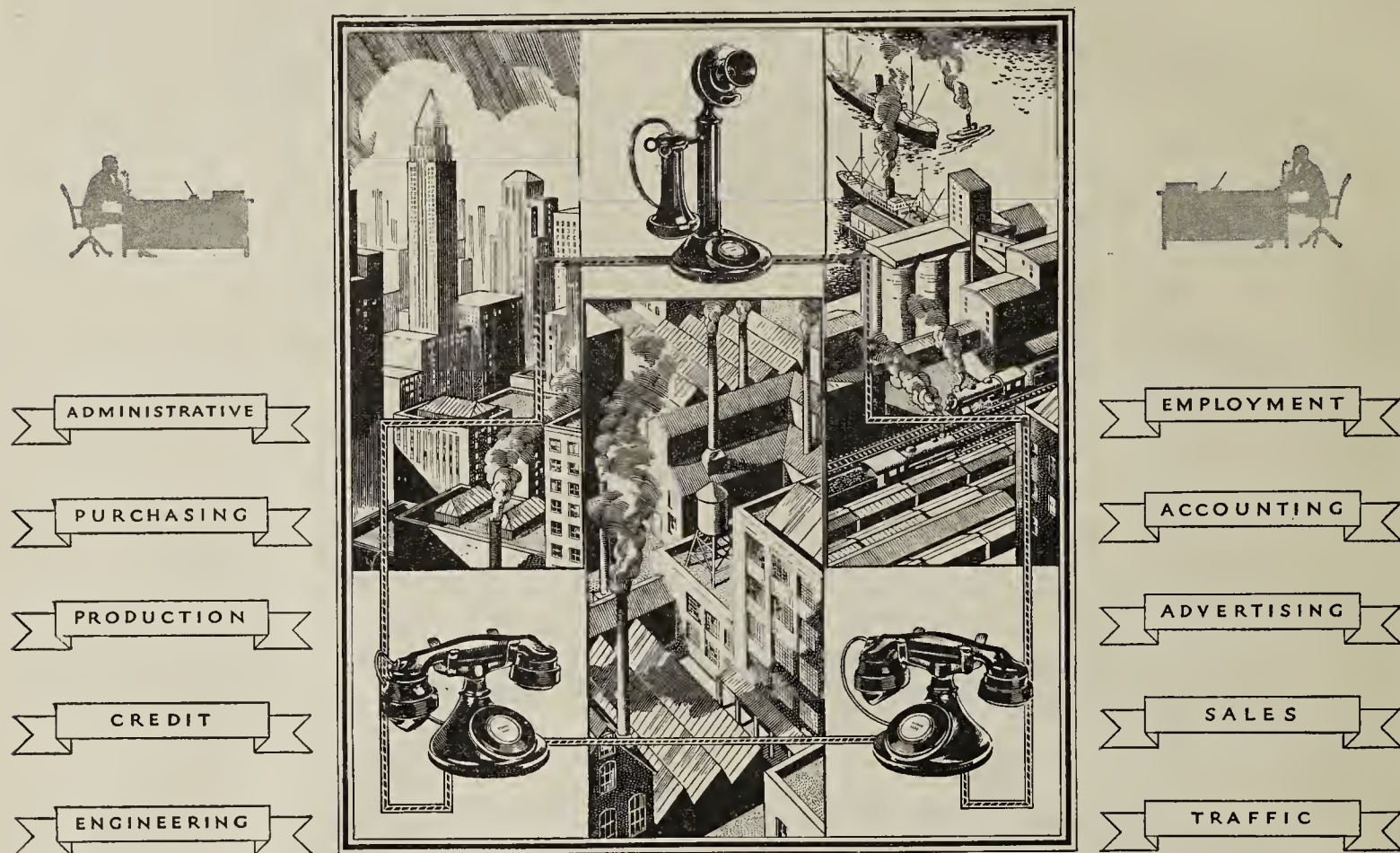


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meaningless marks. The only letters he knew were those of the Braille alphabet, a code of dots embossed on paper. The written language was something to feel, not to see. The letter "A" was three simple dots that affected the finger-tip, not three intricate lines that affected the eye. A few weeks ago he had to read any printed word letter by letter, then mentally translate it into raised dots, before he could say what the word meant. To-day he can spell half-way through a word and then in a flash pronounce it.

"F-A-C-T. . . Oh, it's factory."

The leap is so spontaneously happy that you find yourself laughing with him. And thus he goes venturing through a new world.

OTHER phases of his great adventure were related thus by Earl in an interview in *The Times*:

I was particularly struck with vividness and beautiful coloring of flowers. To me they had been soft and fragrant, but just a dull color. I was astonished at the beauty.

Other things were different. I hardly know what I expected, but they were a revelation when I was able to see after the bandages were removed from my eyes.

I think that the greatest moment coming to me will be when I can see the faces of my friends at the school. I have ideas of their appearance from their speech and actions, but I suppose they will be different than I thought. I am so sorry that all of them can not be as fortunate as I was.

During the time I was attending school, I had always hoped to some day regain my sight. I never gave up thinking that the time was coming when I would be able to see things like other fellows.

I want to be a salesman and travel. After one has been shut out from all the sights of the world in which he lives all his life, it is impossible to see enough of the things of which you have heard.

Of course, I can only distinguish large print now, but I hope, and the physicians believe, that within a short time my sight will be normal. Even as things are, I am more than satisfied with my lot.

When Snow Is Red and Frogs Rain

MR. STOKER'S HORSES REARED AND plunged in justified terror. Mr. Stoker was driving across a desert region in Nevada. Up came a thunderstorm. It didn't rain cats and dogs, but it did rain frogs.

Whence did they come? Why did they come? Perhaps we shall learn, and perhaps not.

Charles Fort reports the incident in "Lo!" (Kendall), a compilation of marvelous and "inexplicable" occurrences having the effect of an onslaught on orthodox science. Mr. Fort insists that science can not explain such extraordinary happenings as these, and indulges in many a sly dig at the gentlemen who spend their lives with microscopes and test-tubes.

But others, as we shall see, do not agree with the Fortean thesis. Charles Fitzhugh Talman, who is in charge of the meteorological library at the United States Weather Bureau in Washington, admits in his recent volume, "The Realm of the Air" (Bobbs, Merrill), that there are showers of frogs and fishes, and that red snow sometimes falls. But he has explanations ready for such phenomena.

Quite recently a black, muddy rain was reported from one district in Canada and a red muddy rain from another district. "Dust in the upper air," guessed the wiseacres.

Mr. Fort has more marvels to report—marvels that should turn Mr. "Believe It or Not" Ripley green with envy. Thus:

Philadelphia *Public Ledger*, August 8, 1891—a great shower of fishes, at Seymour, Indiana. They were unknown fishes.

Public Ledger, February 6, 1890—a shower of fishes in Montgomery County, California. "The fishes belong to a species altogether unknown here."

New York *Sun*, May 29, 1892—a shower, at Coalburg, Alabama, of an enormous number of eels that were unknown in Alabama. Somebody said that he knew of such eels in the Pacific Ocean. Piles of them in the streets—people alarmed—farmers coming with carts, and taking them away for fertilizing material.

London *Evening Standard*, January 3, 1924—red objects falling with snow, at Halmstead, Sweden.

They were red worms from one to four inches in length. Thousands of them streaking down with the snowflakes—red ribbons in a shower of confetti—a carnival scene that boosts my discovery that meteorology is a more picturesque science than most persons, including meteorologists, have suspected.

BUT we can go no farther in Mr. Fort's catalog of wonders, altho it is far, far longer than this excerpt would indicate. Now let us turn to Mr. Talman's "The Realm of the Air" to see what he has to say about red snow:

One of the well-known descriptions of red snow is found in Darwin's account of a journey over the Andes. The footsteps of the mules, he states, were stained pale red, as if their hoofs had been slightly bloody, the snow being colored only where it had been thawed very rapidly or had been accidentally crushed.

In July, 1911, some members of the Sierra Club saw a similar phenomenon while tramping over the lofty Vogelsang Pass in the Yosemite National Park. Whenever the hoofs of their pack animals sank into the deep snow, the prints were splashed with red, as if the snow-crust had cut the mules' feet, and the snow had thus been dyed with blood.

Red snow is a great rarity in the United States, so far as anybody knows, tho it is not uncommon in the polar regions, and has often been reported from the Alps and some other mountainous districts abroad. A natural-color photograph of it reproduced a few years ago in *The National Geographic Magazine*, came from the West coast of Greenland, where, in 1819, Sir John Ross discovered the famous Crimson Cliffs, the dark red snow of which lay to a depth of a foot, with white snow beneath. Specimens of melted snow that he brought home were found to owe their color to a minute organism, to which the name *Protococcus nivalis* was given, but which is now called *Sphaerella nivalis*.

It is now known, however, that several minute forms of life besides this one are capable of coloring snow, and the color is not always red. Broad stretches of yellow snow were found on the ice of the Kara Sea by the Arctic expedition of the Duc d'Orleans; green and blue varieties have been encountered elsewhere. Snow colored by dust is another story. Showers of reddish dust blown from the Sahara, to which southern Europe is much subject, explains some cases of red snow in the Alps.

AND as for zoological cloudbursts, Mr. Talman's chronicle, taken in conjunction with Mr. Fort's, makes us wonder if that good old expression, "raining cats and dogs," may not be based on solid fact. Mr. Talman explains such phenomena in this passage:

W. L. McAtee, of the United States Biological Survey, tells of seeing a silk hat lifted from its owner's head and blown over a ten-story building in the city of Washington. The vortex of a tornado or waterspout furnishes the most favorable skyward route for things that belong on the earth or in the water. Objects weighing scores or even hundreds of pounds are lifted by these whirls. Within a mile or so of a tornado, a shower of cartwheels or cook-stoves would not necessarily constitute a prodigy.

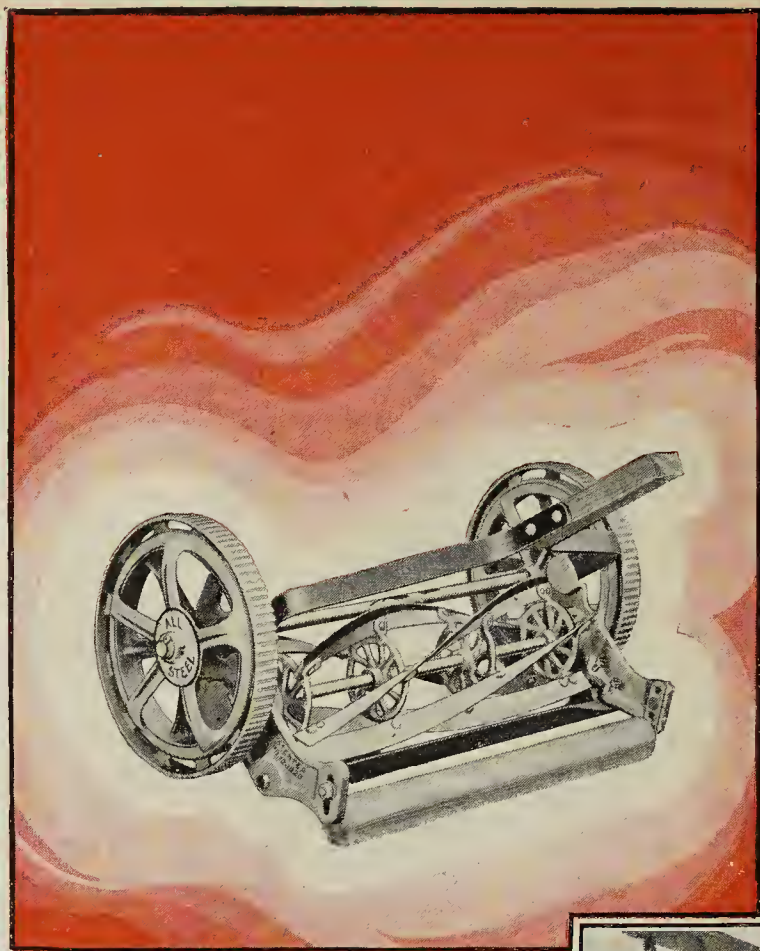
A chicken-coop weighing seventy-five pounds has been carried four miles by a tornado, and a church spire seventeen miles. The Danish physicist, Oersted, tells of a waterspout at Christiansö on the Baltic, that emptied the harbor to such an extent that the greater part of the bottom was uncovered, and many cases are known in which waterspouts or tornadoes have completely drained small ponds.

In such cases quantities of fish and other aquatic creatures are sure to be whirled aloft, and "what goes up must come down." Usually, of course, the falling objects will be widely scattered, and most of them will escape notice, but occasionally a large number will fall at one spot, and their fall will be observed.

The real mystery about rains of fishes is that they are not a great deal more common than existing records indicate them to be. Dr. E. W. Gudger, of the American Museum of Natural History, has for years pursued the hobby of collecting reports of such events from the literature of all ages and countries. Up to December, 1929, he had found records of only seventy-three cases, ranging in date from about 300 to 1928 A. D.

The last-known shower of this kind scattered several hundred small fishes, some alive and some dead, over a cotton-field in North Carolina. In this case the nearest body of water, three-quarters of a mile away, was not known to contain many fish.

Showers of frogs, toads, small reptiles, earthworms, and animals of other kinds have occasionally been reported by eye-witnesses of these events, whose descriptions leave no doubt that the creatures actually fell, and were not merely assumed to have fallen, on account of their sudden appearance in large numbers.



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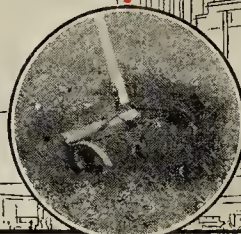
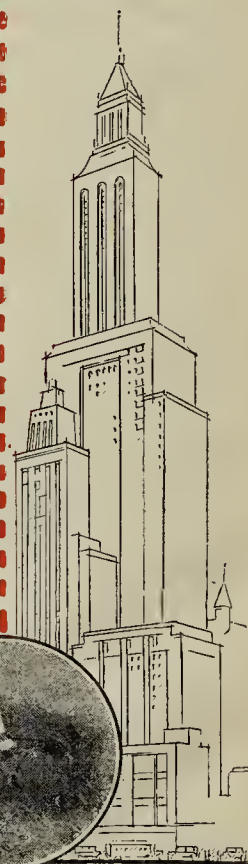
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